

Date: Fri, 19 Aug 94 04:30:34 PDT
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Ham-Homebrew-Errors@UCSD.Edu
Reply-To: Ham-Homebrew@UCSD.Edu
Precedence: Bulk
Subject: Ham-Homebrew Digest V94 #244
To: Ham-Homebrew

Ham-Homebrew Digest Fri, 19 Aug 94 Volume 94 : Issue 244

Today's Topics:

 2N6844 & 2N8844
 4-1000 Homebrew Amp
 50 watt amp for six meter(schems). (2 msgs)
 Answer to 88mH toroid availability
 Current Capacity
 DSP on a SoundBlaster
 e-mail address in text of messages
 Motorola RF Data Handbooks
 Silver Eagle Wiring Diagram
 TNC project
 VFO drift questions
 WANTED: Source for Signetics NE604 or SA604 IF/FM detector chip
 WANTED: Two 6L6G vacuum tubes

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 16 Aug 1994 21:40:06 GMT
From: ihnp4.ucsd.edu!news.cerf.net!mvb.saic.com!MathWorks.Com!
europa.eng.gtefsd.com!gatech!news-feed-1.peachnet.edu!umn.edu!newsdist.tc.umn.edu!
dawn.mmm.com!tcdsp1!tahir@network.ucsd.edu
Subject: 2N6844 & 2N8844
To: ham-homebrew@ucsd.edu

Any information would be appreciated. Even my book doesn't list these
particular 2N's.

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Date: 18 Aug 1994 10:57:06 -0400
From: newstf01.cr1.aol.com!search01.news.aol.com!not-for-mail@uunet.uu.net
Subject: 4-1000 Homebrew Amp
To: ham-homebrew@ucsd.edu

Thanks for the response to my inquiry about passive grid circ uits for 4-1000 Amp. I even found some parts I needed. The project is moving forward slowly with much work on the Power Supply...using a LARGE Powerstat in the primary for max control of voltage and another Powerstat in the screen voltage supply .

I will let all know how it works and will look for any further comments on the DXo-all and be-all project.

73 Russ WA6CWV..Boise, Idaho

Date: Thu, 18 Aug 1994 10:41:40
From: ihnp4.ucsd.edu!dog.ee.lbl.gov!agate!howland.reston.ans.net!
europa.eng.gtefsd.com!sundog.tiac.net!news.sprintlink.net!nwnexus!
news.halcyon.com!halcyon.com!fdugas@network.ucsd.edu
Subject: 50 watt amp for six meter(schems).
To: ham-homebrew@ucsd.edu

I am looking for schematics for a medium power amp for six meters. I am looking for clean signal power. since I live in a apartment, I thought a tube amp would be better. Anyone have any good stories to tell? thanks
73's Fred N7SXX

Date: Thu, 18 Aug 1994 19:33:14 GMT
From: newsgate.melpar.esys.com!melpar!phb@uunet.uu.net
Subject: 50 watt amp for six meter(schems).
To: ham-homebrew@ucsd.edu

fdugas@halcyon.com (Fred Dugas) writes:

>I am looking for schematics for a medium power amp for six meters. I am
>looking for clean signal power. since I live in a apartment, I thought a tube
>amp would be better. Anyone have any good stories to tell? thanks
>73's Fred N7SXX

If you wish, I'll dig back through my old ARRL Handbooks and VHF Manuals and see what's there; copies are free if I find anything of potential interest.

I ran P-P 6146Bs on 6 and another pair on 2 during the 1970s, CW & SSB. Worked as well and seemed as clean as anything else around at that time. However, a word of warning: My Dad, WA4CVA (now SK) ran a Clegg Venus which has about as clean a 40-watt signal as ever I've seen on 6 (I ran spectral measurements on it) and he still had TVI problems; front-end overload and "rusty bolt" effect on a TV across the street from him with a crappy, unmaintained antenna and an old, unmaintained set; and cable TV interference two blocks (!) away because the cable company used unshielded amplifier housings.

The point is, a very clean amplifier does not guarantee that you won't still have problems with TVI. But, it's a necessary first step, IMHO, so your concern is commendable.

(|_|) Paul H. Bock, Jr. K4MSG Internet: pbock@melpar.esys.com
| |) Principal Systems Engineer Telephone: (703) 560-5000 x2062

"You can have my bug when you can pry my cold, dead fingers from around it....." - anonymous radiotelegraph operator

Date: 18 Aug 94 14:01:25 GMT
From: news-mail-gateway@ucsd.edu
Subject: Answer to 88mH toroid availability
To: ham-homebrew@ucsd.edu

While I was at the local electronics store I saw some 88mH toroids made by Amidon. I was really surprised to see a BRAND NEW 88mH coil. The only ones I had ever seen before were surplus. Anyway here is the address from their ad in QST:

Amidon Associates
2216 E. Gladwick St.
Dominguez Hills, CA 90220

(310)763- 5770

You may be able to find them locally too!

Ray
WD5IFS

mack@mails.imed.com

Date: 18 Aug 94 17:05:00 GMT
From: news-mail-gateway@ucsd.edu
Subject: Current Capacity
To: ham-homebrew@ucsd.edu

Ken writes:

>Could someone please email the current capacity of 24 AWG copper wire
>(stranded). It will be used at 13.8V.
>
>I've looked all over and can't find it. Is there a data book that has
>information for "small" circuit components?
>
>Thank you, Ken

Ken,

If you have the ARRL Handbook, look under Component Data for
such things. 24 AWG wire (solid) can handle about .5 amps so stranded
should be able to handle just under that.

Kevin

Legal stuff:

The above opinions are my own and not necessarily those of the staff,
faculty, administration, or lab animals (woof!) of The University of
Texas Health Science Center at San Antonio or anyone else who is not
me.

Kevin R. Muenzler, WB5RUE
muenzlerk@uthscsa.edu

The University of Texas Health
Science Center at San Antonio,
Department of Computing Resources

**** There is no such thing as a Monkey-Proof Program! ****
**** I can prove it! ****

Date: Mon, 15 Aug 1994 18:24:55
From: ihnp4.ucsd.edu!dog.ee.lbl.gov!agate!howland.reston.ans.net!EU.net!sunic!
news.funet.fi!news.csc.fi!nokia.fi!NCSBST01CA.NTC.NOKIA.COM!
BRUSCH@network.ucsd.edu

Subject: DSP on a SoundBlaster
To: ham-homebrew@ucsd.edu

Steven L. Work (slwork@netcom.com) wrote:

: Does anyone know how you configure a Sound Blaster 16 (with an "ASP") to
: do real-time processing of audio signals. What I mean is taking audio
: input from its a/d, manipulating it, and presenting the output on its d/a
: converter immediately. It seems to me that they have designed the
: hardware to be able to do this, but I can't find anything in their
: documentation or on the Creative BBS which describes how to do this.

: By real-time, I mean processing of audio on the fly WITHOUT saving it to
: disk. Examples of such processing would be lead vocal cancellation
: (channel subtraction), surround-sound, and adding echoes.

On a local software archive I found a program which uses a SoundBlaster (type unknown) to perform an FFT, then look for a tone and decode it as morse. The program is stored as fftmorse.zip; the copyright notice is 1992 and the program was written by:

François Jalbert (jalbert@IRO.UMontreal.CA)

The C source code for the program is included and the .doc file includes a good description of the code and the FFT implementation (DFT actually). If you can't find the file on your local PD archive I can probably mail it (it's only 27k).

de G7FTY - Simon [new to internet news groups]

Date: 18 Aug 94 13:10:26 GMT
From: news-mail-gateway@ucsd.edu
Subject: e-mail address in text of messages
To: ham-homebrew@ucsd.edu

It seems that I have started a new thread of discussion. I had made the plea that those wanting e-mail returns include an e-mail address in the text of the message. I now know why!

Some of us read the news groups only in digest form (i.e. we get a big glob of messages as one mail message). The software that does the digesting sometimes removes the sender's address. I have seen several people's messages whose last entry in the routing is not-for-mail@network.ucsd. This is obviously not very helpful in replying to someone!

Of course, those of you who get the messages directly don't have this

problem in making direct replies.

Ray
WD5IFS
mack@mails.imed.com

Date: Thu, 18 Aug 1994 20:38:00 GMT
From: ihnp4.ucsd.edu!dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net!
cs.utexas.edu!utnut!utcsri!newsflash.concordia.ca!pavo.concordia.ca!
md_hill@network.ucsd.edu
Subject: Motorola RF Data Handbooks
To: ham-homebrew@ucsd.edu

In article <1994Aug17.173430.16267@newsgate.sps.mot.com>, lovelace@analog-
design.sps.mot.com writes...
>Call your local sales office and request a copy. Or you can call the Motorola
>Literature Distribution center (they will charge you \$, while the sales office
will
>not), their number is: (602) 994-6561.

>
>
>-----
>| David K. Lovelace 2100 East Elliot Road
|
>| Motorola, Inc. MD: EL368 |
>| Semiconductor Products Sector Tempe, AZ 85284
|
>| Analog IC Division lovelace@analog-design.sps.mot.com |
>| Phone: (602) 413-5878 FAX: (602) 413-4192
|

>-----
>
In the latest (September) issue of Electronics Now, in the New Lit section,
it mentions that the new version of the RF Devices Data Book is available from
the Literature Distribution Centre for FREE *AND* there is an 800 number too!.
Of course, the 800 number is useless if you are calling from Canada :-(
For those of you south of the border, the number is 800-441-2447. I faxed my
request (57 seconds) to (602) 994-6430.

Good luck

de VE2HVV

Date: 18 Aug 94 04:50:36 GMT
From: dziuxsolim.rutgers.edu!pilot.njin.net!smalley@uunet.uu.net
Subject: Silver Eagle Wiring Diagram
To: ham-homebrew@ucsd.edu

Hello,

Does anyone know what the pin configuration is for the connector on an Astatic Silver Eagle microphone? I'm planning to modify mine for use as a desk mike with my 2m radio, but unfortunately lack the pinout diagram. Any assistance will be greatly appreciated. Replies can either be posted to this newsgroup or sent to me directly.

My address is: smalley@pilot.njin.net

Thanks in advance,

John V. Smalley

N2WWN

--

"Imagination is more important than knowledge." - A. Einstein

Date: Tue, 16 Aug 94 22:48:13 GMT
From: ihnp4.ucsd.edu!newshub.sdsu.edu!nic-nac.CSU.net!usc!howland.reston.ans.net!gatech!newsxfer.itd.umich.edu!zip.eecs.umich.edu!panix!198!mgalatz@network.ucsd.edu
Subject: TNC project
To: ham-homebrew@ucsd.edu

Are there any schematics for a TNC for decoding RTTY through a Mac?

Date: 18 AUG 94 14:46:51
From: pa.dec.com!src.dec.com!crl.dec.com!nntpd.lkg.dec.com!mnews.mro.dec.com!est.enet.dec.com!randolph@decwrl.dec.com
Subject: VFO drift questions
To: ham-homebrew@ucsd.edu

I'm building a 40m copy of W1FB's "universal VFO" as seen in QRP Notebook. I have the actual oscillator itself running, no buffer stages yet. About how much drift can I expect out of one of these before I get it closed up in some kind of box? I found that I can blow on it and get it to drift by a couple of hundred Hz, presumably due to cooling/heating...

Description for those without the book: Hartley osc., #6 material toroid and NP0 caps, MPF102 JFET with 9V supply regulated by a Zener. I cheated a bit and used a cheapo trimmer cap in the osc. (Mouser's "6mm snap-in mount", listed as N750). Should I fork over the \$3 for the air trimmer?

-Tom R. N100Q randolph@est.enet.dec.com

Date: 18 Aug 1994 00:01:28 GMT
From: dog.ee.lbl.gov!overload.lbl.gov!agate!msuinfo!netnews.upenn.edu!
news.amherst.edu!news.mtholyoke.edu!uhog.mit.edu!news.kei.com!yeshua.marcam.com!
usc!cs.utexas.edu!utnut!@ihnp4.ucsd.edu
Subject: WANTED: Source for Signetics NE604 or SA604 IF/FM detector chip
To: ham-homebrew@ucsd.edu

I am trying to find a source for the Signetics NE604 or the equivalent SA604 to build a project which appeared in QST about one year ago. I have already tried all of the parts suppliers which advertise in QST and have had absolutely no luck. I only need 1 or 2 of these to build this project. Does anyone know where I could purchase these?

Any help appreciated.

Thanks,
--Rich, VE4AIV
--

Richard F. Lukes	rflukes@silver.cs.UManitoba.CA
Computer Science Department	
University of Manitoba	HOME: (204)-257-6701
Winnipeg, Manitoba CANADA	WORK: (204)-474-8696

Date: 18 Aug 1994 17:16:53 GMT
From: eckart@athena.mit.edu
Subject: WANTED: Two 6L6G vacuum tubes
To: ham-homebrew@ucsd.edu

Please reply to: eckart@mit.edu

Date: 18 Aug 1994 02:10:29 GMT
From: ihnp4.ucsd.edu!dog.ee.lbl.gov!agate!howland.reston.ans.net!
europa.eng.gtefsd.com!news.umbc.edu!rkirk1@network.ucsd.edu
To: ham-homebrew@ucsd.edu

References <32bqoe\$ur@eis.calstate.edu>, <32ggg8\$hsh@hollywood.cinenet.net>,
<1994Aug13.082514.868@ke4zv.atl.ga.us>.umbc.ed

Subject : Re: Homebrew Global Positioning System (GPS)

Gary Coffman (gary@ke4zv.atl.ga.us) wrote:

: In article <32ggg8\$hsh@hollywood.cinenet.net> maustin@hollywood.cinenet.net
(Mark Austin) writes:

: >
: >I had an idea. How about linking up a GPS with a cellular phone and
: >a large battery to power both for a couple of days. Then dial a number
: >on the cellular where you want the GPS to send it's location info and
: >drop the whole bundle into someone's car. Since GPS info can be used
: >with several very cheap street mapping systems (Delorme for one) you'll
: >be able to sit at home and watch them driving down the street on
: >your home computer. Should be able to do this cheap. A couple of
: >hundred dollars (with cheap GPS and cheap phone). I have no ideas
: >on keeping cellular costs down though. One thought would be to set
: >the phone to answer and power up the whole gizmo and then shut down
: >after a call is placed into it. You wouldn't get a continuous
: >signal but you'd be able to find where someone is on demand (if they're
: >within cellular calling range). Such a setup could last for a LONG
: >time with the proper battery.

: You aren't going to be able to get a GPS and cell phone for a couple
: hundred dollars. The cheapest GPS receivers are around \$400, and so
: are cell phones unless you roll their cost into a long term service
: contract. And monthly and per minute cell phone charges will mount
: up fairly rapidly. By using packet radio, amateur or commercial,
: you can send position updates on a regular basis without incurring
: quite as much cost.

: DeLorme Mapping and City Streets are a couple of commercial map
: systems that work with GPS. However, APRS (Automatic Packet Reporting
: System) is in some ways better. While it lacks the friendly user
: interface of the commercial products, and it's pre-made map databases
: are skimpy, you can make your own maps, and it works with local and
: remote GPS receivers (using packet UI frames for the latter). It also
: supports other information about the remote sites such as range and
: bearing data from DF equipment, and arbitrary text messages.

: However, what many of us want is *differential* GPS. The Coast Guard,
: FAA, and others send out position deltas from a fixed benchmark
: receiver that are received and used to correct the reading of the local
: GPS receiver. These transmissions are either at MF or VHF depending on
: the system. A special receiver is required, and either a GPS receiver
: designed to work with differential signals, or a PC that can take the
: timestamped position reports and reconcile them via software, is used

: to give a true position. This method removes the deliberate SA jitter,
: and other error sources such as varying atmospheric propagation factors,
: from the position data. This allows much greater precision in determining
: location than raw GPS alone.

: It would be nice if the APRS author would support this mode in his
: software. Some of us are willing to set up benchmark receivers on
: the amateur bands. That timestamped data could be used to correct
: the positions reported by the rover receivers over packet.

: Gary

: --

: Gary Coffman KE4ZV		You make it,		gatech!wa4mei!ke4zv!gary
: Destructive Testing Systems		we break it.		uunet!rsiatl!ke4zv!gary
: 534 Shannon Way		Guaranteed!		emory!kd4nc!ke4zv!gary
: Lawrenceville, GA 30244				gary@ke4zv.atl.ga.us

This has already been done on an experimental basis here in the Annaoplis
area: A cooperating ham otransmits a differential signal on the same
freq as the APRS net. Receive it thru your TNC and it goes into the
GPS receiver. Works fine.

(Wierd trouble with a missing letter - regrets)

Bob

ht os

End of Ham-Homebrew Digest V94 #244
